

TRANSMITTAL FORM

(To be used for all correspondence
after initial filing)

Application Number	10/625,972
Filing Date	July 23, 2003
First Named Inventor	Phillip I. Tarr
Art Unit	1645
Examiner Name	
Attorney Docket No.	120115.401C2

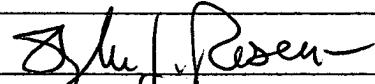
ENCLOSURES (check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Fee Transmittal Form
<input type="checkbox"/> Fee Attached
<input type="checkbox"/> Amendment/Response
<input type="checkbox"/> After Final
<input type="checkbox"/> Affidavits/declaration(s)
<input type="checkbox"/> Extension of Time Request
<input type="checkbox"/> Express Abandonment Request
<input checked="" type="checkbox"/> Information Disclosure Statement; Form PTO-1449
<input type="checkbox"/> Cited References
<input type="checkbox"/> Certified Copy of Priority Document(s)
<input type="checkbox"/> Response to Missing Parts under 37 C.F.R. 1.52 or 1.53
<input type="checkbox"/> Response to Missing Parts/Incomplete Application | <input type="checkbox"/> Drawing(s)
<input type="checkbox"/> Request for Corrected Filing Receipt
<input type="checkbox"/> Licensing-related Papers
<input type="checkbox"/> Petition
<input type="checkbox"/> Petition to Convert to a Provisional Application
<input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address
<input type="checkbox"/> Declaration
<input type="checkbox"/> Statement under 37 CFR 3.73(b)
<input type="checkbox"/> Terminal Disclaimer
<input type="checkbox"/> Request for Refund | <input type="checkbox"/> CD(s), Number of CD(s) _____
<input type="checkbox"/> After Allowance Communication to Technology Center (TC)
<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Status Letter
<input checked="" type="checkbox"/> Return Receipt Postcard
<input type="checkbox"/> Additional Enclosure(s) (please identify below):

 |
|--|---|---|

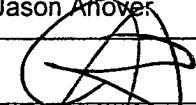
Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Individual Name	Stephen J. Rosenman, Ph.D.	Customer Number
Signature		00500
Date	July 14, 2004	

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Jason Anover	
Signature		Date: July 14, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

497482



PATENT

I hereby certify that on the date specified below, this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

July 14, 2004

Jason Añover

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Phillip I. Tarr et al.
Application No. : 10/625,972
Filed : July 23, 2003
For : ESCHERICHIA COLI 0157:H7 EPITHELIAL ADHESIN

Art Unit : 1645
Docket No. : 120115.401C2
Date : July 14, 2004

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents:

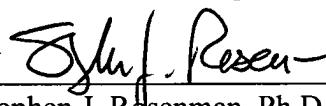
In accordance with 37 CFR 1.56 and 1.97 through 1.98, applicants wish to make known to the Patent and Trademark Office the references set forth on the attached Form PTO-1449. This application is continuation and relies, under 35 U.S.C. § 120, on the earlier filing date of prior Application No. 09/531,050, filed March 20, 2000, now abandoned; which is a continuation of prior Application No. 09/098,082, filed June 16, 1998, now U.S. Patent 6,040,421; which is a divisional of prior Application 08/765,081, filed March 26, 1997, now U.S. Patent 5,798,260; which is a 371 conversion of PCT/US95/06994, filed June 7, 1995; which is a continuation-in-part of prior Application No. 08/265,714, filed June 24, 1994. The references listed on the attached Form PTO-1449 were submitted to and/or cited by the Patent and

supplied, applicants do not admit that it is "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserve the right to traverse or antedate any such reference, as by a showing under 37 CFR 1.131 or other method. Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicants' duty to disclose all information they are aware of which is believed relevant to the examination of the above-identified application, applicants believe that their invention is patentable.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Applicants believe this Information Disclosure Statement has been timely filed, however, the Director is authorized to charge any fee due by way of this Information Disclosure Statement to our Deposit Account No. 19-1090.

Respectfully submitted,
Seed Intellectual Property Law Group PLLC



Stephen J. Rosenman, Ph.D.
Registration No. 43,058

Enclosures:

Postcard
Form PTO-1449

701 Fifth Avenue, Suite 6300
Seattle, Washington 98104-7092
Phone: (206) 622-4900
Fax: (206) 682-6031

497487

FORM PTO-1449 (REV. 7-80)			U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 120115.401C2	APPLICATION NO. 10/625,972
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)			APPLICANTS Phillip I. Tarr et al.		
			FILING DATE July 23, 2003	GROUP ART UNIT 1645	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	3,975,517	08/17/76	Wilson	424	87	
AB	4,443,549	04/17/84	Sadowski	436	548	
AC	4,454,116	06/12/84	Brinton	424	92	
AD	4,472,302	09/18/84	Karkhanis	260	112 R	
AE	4,652,448	03/24/87	Sadowski	424	87	
AF	4,702,911	10/27/87	McMichael	424	92	
AG	4,725,435	02/16/88	Brinton, Jr. et al.	424	92	
AH	4,736,017	04/05/88	O'Hanley et al.	530	350	
AI	4,795,803	01/03/89	Lindberg et al.	530	324	
AJ	5,066,596	11/19/91	Manning et al.	435	252.33	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AK	WO 92/11354	07/09/92	WIPO		
	AL	WO 94/19482	09/01/94	WIPO		

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AM	Acres, S. et al., "Immunization of Calves Against Enterotoxigenic Colibacillosis by Vaccinating Dams with Purified K99 Antigen and Whole Cell Bacterins," <i>Infect Immun.</i> 25(1):121-6, July 1979.
AN	Beebakhee, G. et al., "Cloning and Nucleotide Sequence of the eae Gene Homologue from Enterohemorrhagic <i>Escherichia Coli</i> Serotype 0157:H7," <i>FEMS Microbiol. Lett.</i> 91:63-68, 1992.
AO	Bilge, S. et al., "Molecular Characterization of a Fimbrial Adhesin, F1845, Mediating Diffuse Adherence of Diarrhea-associated <i>Escherichia coli</i> to HEp-2 cells," <i>J Bacteriol.</i> 171(8):4281-9, August 1989.

EXAMINER	DATE CONSIDERED
* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).	

FORM PTO-1449 (REV.7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 120115.401C2	APPLICATION NO. 10/625,972
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		APPLICANTS Phillip I. Tarr et al.			
		FILING DATE July 23, 2003		GROUP ART UNIT 1645	

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	BA	5,079,165	01/07/92	Clements et al.	435	252.8	
	BB	5,137,721	08/11/92	Dallas	424	93 A	
	BC	5,182,109	10/26/93	Tamura et al.	424	92	
	BD	5,208,024	05/04/93	Van Den Bosch	424	92	
	BE	5,286,484	02/15/94	Rodriguez et al.	435	252.33	
	BF	5,475,098	12/12/95	Hall et al.	536	23.7	
	BG	5,776,751	07/07/98	Boulton et al.	435	194	
	BH	5,834,187	11/10/98	Green et al.	435	6	
	BI	5,840,518	11/24/98	Morishita et al.	435	69.1	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	BJ					

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

BK		Bokete, T, et la., "Shiga-like Toxin-producing <i>Escherichia coli</i> in Seattle Children: a Prospective Study," <i>Gastroenterology</i> 105(6):1724-31, December 1993.
BL		Cravioto, A. et al., "Association of <i>Escherichia coli</i> HEp-2 Adherence Patterns with Type and Duration of Diarrhea," <i>Lancet</i> 337(8736):262-4, February 2, 1991.
BM		Donnenberg, M. et al., "Enteropathogenic <i>Escherichia coli</i> ," <i>Infect Immun.</i> 60(10):3953-61, October 1992.
BN		Donnenberg, M. et al., "The Role of the eae Gene of Enterohemorrhagic <i>Escherichia coli</i> in Intimate Attachment in Vitro and in a Porcine Model," <i>J Clin Invest.</i> 92(3):1418-24, September 1993.
BO		Duchet-Suchaux, M. et al., "Passive Protection of Suckling Infant Mice Against F41-Positive Enterotoxigenic <i>Escherichia coli</i> Strains by Intravenous Inoculation of the Dams with Monoclonal Antibodies Against F41," <i>Infect Immun.</i> 60(7):2828-34, July 1992.

EXAMINER	DATE CONSIDERED
----------	-----------------

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449 (REV.7-80)			U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 120115.401C2	APPLICATION NO. 10/625,972
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)			APPLICANTS Phillip I. Tarr et al.			
			FILING DATE July 23, 2003		GROUP ART UNIT 1645	

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	CA						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	CB					

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

CC	Dytoc, M. et al., "Multiple Determinants of Verotoxin-producing <i>Escherichia coli</i> O157:H7 Attachment-effacement," <i>Infect Immun.</i> 61(8):3382-91, August 1993.
CD	Evans, G. et al., "High Efficiency Vectors for Cosmid Microcloning and Genomic Analysis," <i>Gene</i> 79(1):9-20, June 30, 1989.
CE	Francis, D. et al., "Evaluation of a Live Avirulent <i>Escherichia coli</i> Vaccine for K88+, LT+ Enterotoxigenic Colibacillosis in Weaned Pigs," <i>Am J Vet Res.</i> 52(7):1051-5, July 1991.
CF	Fratamico, P. et al., "Studies on <i>Escherichia coli</i> Serotype O157:H7 Strains Containing a 60-MDa Plasmid and on 60-MDa Plasmid-cured Derivatives," <i>J Med Microbiol.</i> 39(5):371-81, November 1993.
CG	Griffin, P. et al., "Illnesses Associated with <i>Escherichia coli</i> O157:H7 Infections. A Broad Clinical Spectrum," <i>Ann Intern Med.</i> 109(9):705-12, November 1, 1988.
CH	Ikemori, Y. et al., "Protection of Neonatal Calves Against Fatal Enteric Colibacillosis by Administration of Egg Yolk Powder from Hens Immunized with K99-piliated Enterotoxigenic <i>Escherichia coli</i> ," <i>Am J Vet Res.</i> 53(11):2005-8, November 1992.
CI	Isaacson, R. et al., "Immunization of Suckling Pigs Against Enterotoxigenic <i>Escherichia coli</i> -induced Diarrheal Disease by Vaccinating Dams with Purified K99 or 987P Pili: Antibody Production in Response to Vaccination," <i>Infect Immun.</i> 29(2):824-6, August 1980.
CJ	Junkins, A. et al., "Comparison of Adherence Properties of <i>Escherichia Coli</i> O157:H7 and a 60-megadalton Plasmid-cured Derivative," <i>Curr. Microbiol.</i> 19:21-27, 1989.
CK	Karch, H. et al., "A Plasmid of Enterohemorrhagic <i>Escherichia coli</i> O157:H7 is Required for Expression of a New Fimbrial Antigen and for Adhesion to Epithelial Cells," <i>Infect Immun.</i> 55(2):455-61, February 1987.

EXAMINER	DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449 (REV.7-80)			U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 120115.401C2	APPLICATION NO. 10/625,972
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)			APPLICANTS Phillip I. Tarr et al.			
			FILING DATE July 23, 2003		GROUP ART UNIT 1645	

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	DA						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION
		DB			YES NO

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

DC		Kimura, A. et al., "Bordetella Pertussis Filamentous Hemagglutinin: Evaluation as a Protective Antigen and Colonization Factor in a Mouse Respiratory Infection Model," <i>Infect Immun.</i> 58(1):7-16, January 1990.
DD		Louie, M. et al., "Expression and Characterization of the eae, A Gene Product of <i>Escherichia coli</i> Serotype O157:H7," <i>Infect Immun.</i> 61(10):4085-92, October 1993.
DE		Moon, H. et al., "Mechanisms of Association of Enteropathogenic <i>Escherichia coli</i> with Intestinal Epithelium," <i>Am J Clin Nutr.</i> 32(1):119-27, January 1979.
DF		Morgan, R. et al., "Immunization of Suckling Pigs Against Enterotoxigenic <i>Escherichia coli</i> -induced Diarrheal Disease by Vaccinating Dams with Purified 987 or K99 Pili: Protection Correlates with Pilus Homology of Vaccine and Challenge," <i>Infect Immun.</i> 22(3):771-7, December 1978.
DG		Morris, J. et al., "Passive Protection of lambs Against Enteropathogenic <i>Escherichia coli</i> : Role of Antibodies in Serum and Colostrum of Dams Vaccinated with K99 Antigen," <i>J Med Microbiol.</i> 13(2):265-71, May 1980.
DH		Pecha, B. et al. "Gal-Gal Pili Vaccines Prevent Pyelonephritis by Piliated <i>Escherichia coli</i> in a Murine Model. Single-component Gal-Gal Pili Vaccines Prevent Pyelonephritis by Homologous and Heterologous piliated <i>E. coli</i> Strains," <i>J Clin Invest.</i> 83(6):2102-8, June 1989.
DI		Ratnam, S. et al., "Characterization of <i>Escherichia coli</i> Serotype O157:H7," <i>J Clin Microbiol.</i> 26(10):2006-12, October 1988.
DJ		Runnels, P. et al., "F41 Pili as Protective Antigens of Enterotoxigenic <i>Escherichia coli</i> that Produce F41, K99, or Both Pilus Antigens," <i>Infect Immun.</i> 55(3):555-8, March 1987.

EXAMINER	DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449 (REV.7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 120115.401C2	APPLICATION NO. 10/625,972
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		APPLICANTS Phillip I. Tarr et al.			
		FILING DATE July 23, 2003		GROUP ART UNIT 1645	

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	EA						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION
					YES NO
	EB				

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EC	Sherman, P. et al., "Outer Membranes are Competitive Inhibitors of <i>Escherichia coli</i> O157:H7 Adherence to Epithelial Cells," <i>Infect Immun.</i> 59(3):890-9, March 1991.
ED	Sherman, P. et al., "Adherence of Vero Cytotoxin-producing <i>Escherichia coli</i> of Serotype O157:H7 to Human Epithelial Cells in Tissue Culture: Role of Outer Membranes as Bacterial Adhesions," <i>J Med Microbiol.</i> 26(1):11-7, May 1988.
EE	Sherman, P. et al., "Attaching and Effacing Adherence of Vero Cytotoxin-producing <i>Escherichia coli</i> to Rabbit Intestinal Epithelium in Vivo," <i>Infect Immun.</i> 56(4):756-61, April 1988.
EF	Sojka, W. et al., "Passive Protection of Lambs Against Experimental Enteric Colibacillosis by Colostral Transfer of Antibodies from K99-vaccinated Ewes," <i>J Med Microbiol.</i> 11(4):493-9, November 1978.
EG	Tarr, P. et al., "The increasing Incidence of the Hemolytic-uremic Syndrome in King County, Washington: Lack of Evidence for Ascertainment Bias," <i>Am J Epidemiol.</i> 129(3):582-6, March 1989.
EH	Tarr, P. et al., "Genotypic Variation in Pathogenic <i>Escherichia coli</i> O157:H7 Isolated from Patients in Washington, 1984-1987," <i>J Infect Dis.</i> 159(2):344-7, February 1989.
EI	Tarr, P. et al., " <i>Escherichia coli</i> O157:H7 and the Hemolytic Uremic Syndrome: Importance of Early Cultures in Establishing the Etiology," <i>J Infect Dis.</i> 162(2):553-6, August 1990.
EJ	Taylor, R. et al., "Broad-host-range Vectors for Delivery of TnphoA: Use in Genetic Analysis of Secreted Virulence Determinants of <i>Vibrio Cholerae</i> ," <i>J Bacteriol.</i> 171(4):1870-8, April 1989.
EK	Taylor, R. et al., "Use of phoA Gene Fusions to Identify a Pilus Colonization Factor Coordinately Regulated with Cholera Toxin," <i>Proc Natl Acad Sci U S A.</i> 84(9):2833-7, May 1987.

EXAMINER	DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449 (REV.7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 120115.401C2	APPLICATION NO. 10/625,972
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		APPLICANTS Phillip I. Tarr et al.			
		FILING DATE July 23, 2003		GROUP ART UNIT 1645	

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	FA						
	FB						
	FC						
	FD						
	FE						
	FF						
	FG						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	FH					
	FI					
	FJ					
	FK					

OTHER PRIOR ART *(Including Author, Title, Date, Pertinent Pages, Etc.)*

FL	Toth, I. et al., "Influence of the 60-megadalton Plasmid on Adherence of <i>Escherichia coli</i> O157:H7 and Genetic Derivatives," <i>Infect Immun.</i> 58(5):1223-31, May 1990.
FM	Wells, J. et al., "Laboratory Investigation of Hemorrhagic Colitis Outbreaks Associated with a Rare <i>Escherichia coli</i> Serotype," <i>J Clin Microbiol.</i> 18(3):512-20, September 1983.
FN	Wells, J. et al., "Isolation of <i>Escherichia coli</i> Serotype O157:H7 and other Shiga-like-toxin-Producing <i>E. coli</i> from Dairy Cattle," <i>J Clin Microbiol.</i> 29(5):985-9, May 1991.
FO	Yokohama, H. et al., "Passive Protective Effect of Chicken Egg Yolk Immunoglobulins Against Experimental Enterotoxigenic <i>Escherichia coli</i> Infection in Neonatal Piglets," <i>Infect Immun.</i> 60(3):998-1007, March 1992.
FP	Yu, J. et al., "Cloning and Characterization of the eae Gene of Enterohaemorrhagic <i>Escherichia coli</i> O157:H7," <i>Mol Microbiol.</i> 6(3):411-7, February 1992.

EXAMINER	DATE CONSIDERED
----------	-----------------

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).